

REMARKS/ARGUMENTS

In response to the *Final* Office Action dated August 4, 2010, reconsideration is respectfully requested.

Claim Rejections Under 35 U.S.C. §101

Claim 30 stands rejected under 35 U.S.C. §101 as lacking patentable utility. Claim 30 has been amended as suggested by the Examiner to recite a computer program product residing on a non-transitory processor-readable medium. Claim 30 is believed to satisfy 35 U.S.C. §101.

Claim Objections

Claim 5 stands objected to for reciting “location disclosure,” which lacks strict antecedent basis. Claim 5 has been amended as suggested by the Examiner to recite “location distribution.”

Discussion of rejections under 35 U.S.C. §103

Claims 1, 4-5, 7-17, 29-30, 44-47

Claims 1, 4-5, 7-17, 29-30, 44-47 stand rejected under 35 U.S.C. §103(a) in view of U.S. Pat. App. Pub. No. 20030023726 (Rice) in view of U.S. Pat. App. Pub. No. 20010055394 (Vantinen).

Independent claim 1 is patentable in view of Rice in view of Vantinen. Claim 1 recites a method of providing location services, the method comprising performing authorization and authentication of a location client from which a request for location information is received, and performing authorization and authentication for location determination to determine whether a second network entity is authorized for the location information and to authenticate the second network entity. The Examiner acknowledged that Rice does not teach performing authorization or authentication for location determination. Office Action, pp. 5-6. The Office Action cited

paragraphs 61 and 64 of Vantinen as teaching these features. Paragraphs 61 and 64 of Vantinen, however, discuss authorization and authentication of location information distribution, but not determination.

Paragraph 61 of Vantinen discusses that a “first security association allows the IP device to authenticate the Location Server,” that a “second security association . . . allows the IP device to transmit location information confidentially to the Location Server,” and that “the IP device authorizes the mobile station to grant a permission to transmit location information to the Location Server).” Thus, the location server, that requests location information, can be authenticated and authorized to have location information transmitted to it.

Paragraph 64 discusses a situation where an “IP device itself has positioning capability.” In this instance, the IP device “may wish to exchange information about its geographical location directly with a Location Server.” This paragraph discusses authentication for location information distribution, specifically reading that “[it] is also possible that the mobile station denies the cellular network to transmit information to the Location Server, but the IP device, after authenticating the Location Server, transmits location information to the Location Server.” (emphasis added).

Thus, paragraphs 61 and 64 of Vantinen cited in the Office Action discuss authorization and authentication of transmission (i.e., distribution) of location information, but do not teach or suggest performing authorization or authentication for location determination as recited in claim 1. For at least these reasons, independent claim 1 is, and claims 4-5 and 7-17 that depend from claim 1 are, patentable in view of Rice in view of Vantinen.

Independent claims 30 and 44, and corresponding dependent claims, are patentable in view of Rice in view of Vantinen for reasons similar to reasons discussed with respect to claim 1. Claim 30 recites a computer program product comprising instructions configured to cause a processor to “authenticate [a] mobile station for location determination . . . based on a second security procedure, independent of [a] first security procedure” used to authenticate a location client requesting location information of the mobile station. Similarly, claim 44 recites “establishing a secure determination session, between [a] network and [a] mobile station, independent of [a] secure disclosure session, to authenticate [a] request for

location determination.” Neither Rice nor Vanttinen, alone or in combination, teach or suggest to authenticate a mobile station for location determination as recited in claims 30 or 44. Thus, for at least these reasons, claims 30 and 44, and claims 45-47 that depend from claim 44, are patentable in view of Rice in view of Vanttinen.

Independent claim 29 is also patentable in view of Rice in view of Vanttinen. Claim 29 recites an apparatus comprising “means for receiving a request for location information for a mobile station from a location client,” “means . . . to obtain a first session key . . . for authentication and encryption of messages exchanged between a first network entity and the mobile station,” and “means for performing location determination via a first secure LCS session using [a] first session key to obtain location information.” Thus, the apparatus has means to securely obtain location information between a first network entity and the mobile station for use in location determination of the mobile station requested by a location client. Paragraphs 9 and 61-63 of Vanttinen, cited for teaching these features, discuss that a location request from an LCS client may be encrypted (paragraph 9), and that location information (i.e., the location of a mobile device) may be transmitted to a location server via encrypted data (paragraphs 61-63). There is no teaching of any “means for performing location determination via a first secure LCS session using [a] first session key” that is “used for authentication and encryption of messages exchanged between a first network entity and the mobile station” as recited in claim 29. (emphasis added). Claim 29 is patentable in view of Rice in view of Vanttinen for at least these reasons.

Claim 3

Claim 3 stands rejected under 35 U.S.C. §103(a) in view of Rice and Vanttinen, further in view of U.S. Patent No. 6,064,471 (Horn). Horn is not cited for making up for the deficiencies of Rice and Vanttinen noted above with respect to claim 1, upon which claim 3 depends. Thus, claim 3 is patentable in view of Rice in view of Vanttinen in view of Horn for at least the reasons discussed above with respect to claim 1.

Claims 48-50

Claims 48-50 stand rejected under 35 U.S.C. §103(a) in view of Vanttinen in view of Rice.

Claims 48-50 are patentable in view of Vanttinen in view of Rice for reasons similar to reasons discussed above with respect to claim 1. Independent claim 48 recites a system comprising a home network server configured to authenticate a request from a location client for location disclosure of a mobile device using a secure disclosure session with the location client, and a serving network server configured to establish a secure determination session, independent of the secure disclosure session, to authenticate the mobile station. Neither Vanttinen nor Rice, alone or in combination, teach or suggest a server configured to establish a secure determination session to authenticate a mobile device whose location is requested. For at least these reasons, independent claim 48 is, and claims 49-50 that depend from claim 48 are, patentable in view of Vanttinen in view of Rice.

CONCLUSION

In view of the foregoing, all claims now pending in this Application are believed to be in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

It is believed that the instant response is filed within the shortened statutory period for response provided in the *Final* Office Action of August 4, 2010.

If a fee is required for an extension of time under 37 CFR 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account. In the event that additional fees are required or credit is due, authorization is hereby given to charge or credit Deposit Acct. No. 17-0026.


Docket No. 030157
Amendment under 37 CFR 1.116 Expedited Procedure
Examining Group 2419

Serial No. 10/792,062

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned.

Dated: 10/1/10

Respectfully submitted,


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